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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/688,246	10/16/2003	Chenera Balan	A-825	2469

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EXAMINER

SACKEY, EBENEZER O

ART UNIT	PAPER NUMBER
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1624

MAIL DATE	DELIVERY MODE
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09/10/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/688,246

Applicant(s)

BALAN ET AL.

Examiner

EBENEZER SACKEY

Art Unit

1624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 June 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 66-85 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 66-85 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of the Claims

Claims 66-85 are pending.

Specification

The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Response to Restriction

Applicant's election of Group I, and species of Example 51 in the reply filed on 06/15/07 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

The Examiner note's applicant's election of Group 1 and species of Example 51, based on prior claims 41-65. The scope of the invention encompassing the elected species

and Group are examined with respect to the elected subject matter is as follows: In new claim 66, Q¹ and Q² are nitrogen; o is 2; n is 2; Q³-Q⁶ is each carbon and R⁴ is optionally substituted or unsubstituted pyridine or dihydro or tetrahydro derivatives thereof. The numerous variables e.g., R¹⁻³, Q³-Q⁶, m, n, o, Q¹ and Q² etc., and their voluminous, complex meanings and their seemingly endless permutations and combinations in addition to the proviso section in the claims, make it unduly burdensome to determine the full scope and complete meaning of the claimed subject matter. In addition, the claimed subject matter cannot be regarded as being a clear and concise description of the subject matter for which protection is sought.

The remaining subject matter of claims 66-85 that is not drawn to the elected invention identified *supra* stand withdrawn from consideration as being drawn to non-elected subject matter, 37 CFR 1.142(b). The remaining compounds which are not within the generic concept, which are independent and distinct from the generic concept and do not have unity with the elected species are therefore withdrawn by means of the restriction requirement. Applicant's claims involve more than one independent or distinct invention. Under 35 U.S.C 121, the claims may be restricted and the examination limited to a restricted invention. The withdrawn subject matter is properly restricted as it differs materially in structure and element from the elected invention identified *supra* so as to be patentably distinct therefrom.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 102

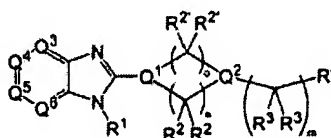
The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 66-71, 73-75, 77-85 are rejected under 35 U.S.C. 102(e) as being anticipated by Sun et al.,(U.S.Patent Application Publication number 2004/0186111).

Applicants claim compounds of structural formula shown in claim 66, where all



the substituents are as defined in claim 66

Sun et al., disclose compounds, which anticipates the recited claims above. See Examples Table VI on page 159 compounds CAW, CBS, CCE, CCF, on page 160 compound CCU etc. The reference is replete with anticipatory compounds far too many to list when Q³-Q⁶ is carbon and R⁴ is pyridyl. See table VIII, pages 166-168, Table X, pages 173-174, Table XII, pages 180-181. Note the reference compounds disclose activity as antagonists for glutamate receptors (mGluR1 and mGluR5 and also as VR1 receptor).

Claim Rejections - 35 U.S.C. § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this

Office action:

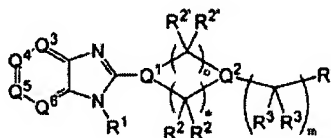
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 66-85 are rejected under 35 U.S.C. 103(a) as being unpatentable over Winn et al., (U.S. Patent number 4,093,726) and Sun et al., each taken alone.

Applicants claim compounds of structural formula shown in claim 66, where all



the substituents are as defined in claim 66

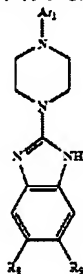
Determination of the scope and content of the prior art (MPEP §2141.01)

Winn et al., teaches compounds similar to instant formula shown in claim 66 that possess antihypertensive properties. See the entire reference especially species listed in

column 4, Example XIII, lines 34-35 which is a homolog of the current claims (i.e., a bismethoxy vs. bisethoxy) and the rest of the Examples.

Note Sun et al., has been applied as an anticipatory reference and incorporated herein.

Compounds CAW and CBS of Sun et al., are adjacent positional isomers of the claimed



compounds

Ascertainment of the difference between the prior art and the claims (MPEP §2141.02)

The instant compounds differ from Winn et al., compounds in that the reference compounds are homologs of the claimed compounds. See *In re Wood*, 199 USPQ 137-142 regarding the use of homologs. With regards to Sun et al., the compounds differ from the claimed compounds in being positional isomers. However, positional isomers are not deemed patentably distinct from the claimed compounds absent a showing of unexpected results. See *Ex parte Engelhardt*, 208 U.S.P.Q and *In re Crouse*, 150 U.S.P.Q. 554 regarding positional isomerism.

Finding of prima facie obviousness---rational and motivation (MPEP §2142-2143)

Thus, at the time of filing this application, one of ordinary skill in the art would have found the instant compounds *prima facie* obvious over the references compounds since the reference compounds teaches homologs and positional isomers under the genus of formula shown in claim 66 for treating the similar diseases. Additionally, it is well settled that a reference may be relied upon for all that it would have reasonably conveyed to the skilled artisan, *In re Lamberti* 545 F.2d 747, 192 USPQ 278 (1976).

Accordingly, one of ordinary skill in the art would thus have been motivated to prepare compounds embraced by the disclosed reference genus with a reasonable expectation that the resulting compounds can be used to treat various ailments. Furthermore, the motivation to prepare this compound is the close structural similarities to the disclosed compounds of the reference, i.e., the alkyl homologs and positional isomers as noted above. Thus, the skilled artisan would expect the close structural similarities of the compounds to possess similar properties. See *In re Wood*, 199 USPQ 137-142.

Moreover, the motivation as to why one of ordinary skill would conceive and use similar compounds as set forth supra in the instant case was rendered by the Court which stated in *In re Gyurik et al.*, 596 F.2d 1012, 201 USPQ 552 at 557 that:

“In obviousness rejections based in close similarity in chemical structure, the necessary motivation to make a claimed compound, and thus the prima facie case of obviousness rises from the expectation that compounds similar in structure will have similar properties”. Thus, the instantly claimed method using the compounds would have been suggested to one of ordinary skill in the art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to E. Sackey whose telephone number is (571) 272-0704.

The examiner can normally be reached on Monday-Friday from 7:30 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James O. Wilson, can be reached on (571) 272-0661. The fax phone number for this Group is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or

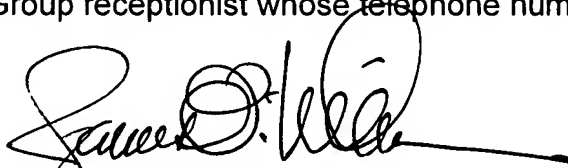
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proceeding should be directed to the Group receptionist whose telephone number is

(571) 272-1600.

EOS

August 28, 2007

A handwritten signature in black ink, appearing to read "James O. Wilson", written over a horizontal line.

James O. Wilson
Supervisory Patent Examiner
Art Unit 1624, Group 1600
Technology Center 1